AMENDMENTS TO THE CLAIMS

This listing replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Original) A method for preparing a Langerhans cell, which comprises culturing a human peripheral blood mononuclear cell in the presence of Notch ligand, GM-CSF, and TGF-β.

2. (Original) A method for preparing a Langerhans cell, which comprises transducing Notch signaling from Notch of a human peripheral blood mononuclear cell using Notch ligand, and culturing the human peripheral blood mononuclear cell in the presence of GM-CSF and TGF-β.

3. (Original) The method for preparing a Langerhans cell according to claim 1 or 2, which is characterized in that Notch ligand is immobilized on a culture vessel.

4. (Original) The method for preparing a Langerhans cell according to claim 3, wherein Notch ligand constitutes a fusion peptide with another peptide, and an antibody reacting with said other peptide is immobilized on the culture vessel, so that Notch ligand is immobilized on the culture vessel via the bond between said antibody and said other peptide.

5. (Original) The method for preparing a Langerhans cell according to claim 4, wherein said other peptide is myc.

6. (Original) The method for preparing a Langerhans cell according to any one of claims 1 to 5, wherein Notch ligand is selected from the group consisting of Delta-1, Delta-2, Delta-3, Delta-4, Jagged-1, and Jagged-2.

7. (Original) The method for preparing a Langerhans cell according to claim 6, wherein Notch ligand is Delta-1.

8. (Original) The method for preparing a Langerhans cell according to claim 1 or 2, wherein the human peripheral blood mononuclear cell is an isolated CD14-positive cell.

9. (Original) The method for preparing a Langerhans cell according to any one of claims 1 to 8, which is characterized in that E-cadherin, Langerin, and CCR6 are expressed on the surface of the Langerhans cell.

10. (Original) The method for preparing a Langerhans cell according to claim 9, which is characterized in that MHC class I molecule HLA-ABC, MHC class II molecule HLA-DR, CD80, and CD86 are further expressed on the surface of the Langerhans cell.

11. (Original) A method for preparing a Langerhans cell, which further comprises adding at least one selected from the group consisting of CD40 ligand, TNF-α, and LPS to the Langerhans cell prepared by the method according to any one of claims 1 to 10, and culturing the obtained mixture.

12. (Cancelled)

13. (Cancelled)

14. (Withdrawn) The Langerhans cell prepared by the method according to any one of claims 1 to 13.

15. (Withdrawn) The Langerhans cell according to claim 14, on the surface of which E-cadherin, Langerin, and CCR6 are expressed.

16. (Withdrawn) The Langerhans cell according to claim 15, on the surface of which MHC class I molecule HLA-ABC, MHC class II molecule HLA-DR, CD80, and CD86 are further expressed.

17. (Withdrawn) A Langerhans cell derived from a human peripheral blood mononuclear cell, on the surface of which E-cadherin, Langerin, CCR6, MHC class I molecule HLA-ABC, MHC class II molecule HLA-DR, CD80, and CD86 are expressed.

18. (Withdrawn) The Langerhans cell according to any one of claims 15 to 17, which is an immature cell.

19. (Withdrawn) The Langerhans cell according to any one of claims 15 to 17, which is a mature cell.

20. (Withdrawn) A pharmaceutical composition comprising the Langerhans cell according to any one of claims 14 to 19.

21. (Withdrawn) The pharmaceutical composition according to claim 20, which is a therapeutic agent for cancers or infectious diseases.

22. (Withdrawn) The pharmaceutical composition according to claim 21, wherein the Langerhans cell is a mature cell.

23. (Withdrawn) The pharmaceutical composition according to claim 20, which is used for suppression of graft rejection after transplantation of cells, organs, or tissues: for treatment of graft versus host disease: and for treatment of autoimmune diseases or allergic diseases.

24. (Withdrawn) The pharmaceutical composition according to claim 23, wherein the Langerhans cell is an immature cell.

25. (Original) A method for preparing a Langerhans cell used for treatment of cancers or infectious diseases, which comprises culturing a peripheral blood mononuclear cell collected from a human in the presence of Notch ligand, GM-CSF, and TGF-β.

26. (Original) A method for preparing a Langerhans cell used for suppression of cancers, infectious diseases, or graft rejection after transplantation of cells, organs, or tissues; for treatment of graft versus host disease, and for treatment of autoimmune diseases or allergic diseases; wherein said method comprises culturing a peripheral blood mononuclear cell collected from a human in the presence of Notch ligand, GM-CSF, and TGF-β.

27. (Original) The method for preparing a Langerhans cell used for treatment of the diseases according to claim 25 or 26, wherein Notch ligand is selected from the group consisting of Delta-1, Delta-2, Delta-3, Delta-4, Jagged-1, and Jagged-2.

28. (Original) The method for preparing a Langerhans cell used for treatment of the diseases according to claim 27, wherein Notch ligand is Delta-1.